

REMARKS

In the Official Action mailed on **30 September 2008**, Examiner reviewed claims 1-25. Examiner rejected claims 1-25 under 35 U.S.C. § 103(a) as being unpatentable over Balfanz et al. ("*Talking to Strangers: Authentication in Ad-Hoc Wireless Networks*," hereinafter "Balfanz"), in view of Weiner et al. (U.S. Pub. No. 2006/0030759, hereinafter "Weiner"), further in view of Hermann (EP 1,024,626, hereinafter "Hermann"), and further in view of Lowensohn et al. (U.S. Pub. No. 2004/0230809, hereinafter "Lowensohn").

Rejection under 35 U.S.C. § 103(a)

Examiner rejected claims 1-25 under 35 U.S.C. § 103 as being unpatentable over Balfanz, in view of Weiner, further in view of Hermann, and further in view of Lowensohn. Specifically, Examiner averred that:

"It would have obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Hermann to Balfanz and Weiner to prevent any accidental information exchange." (see Office Action, page 4)

Applicant respectfully disagrees. Embodiments of the present invention receive provisioning information from the provisioning device over a **bidirectional location-limited channel**. Hermann clearly teaches away from embodiments of the present invention, because Hermann discloses a **unidirectional** wireless communication channel:

- "...the user points with the personal device to the serving device or at least in this direction and passes via a **unidirectional** wireless communication channel, e.g. via an infrared channel, **a sequence or an initial-sequence that**

comprises a password, a public key..." (see Hermann, column 6, lines 34-40; emphasis added)

- "For initiating the communication session and for transmitting an initial-sequence that may contain sensitive information, the **unidirectional** wireless communication channel **can ensure** that only the target device receives the initial-sequence" (see Hermann, column 7, lines 21-25)
- "...the user touches then in an intuitive way the serving device for initiating the **unidirectional** wireless communication **via his body**" (see Hermann, column 7, lines 47-49 of column 7)
- "**The first device 1 sends a sequence 5** with encryption information **via a unidirectional wireless communication channel 3** to the target device, the second device 2." (see Hermann, column 10, lines 35-38)
- "**By transmitting** the initiating token *Tinit* via the **unidirectional** wireless communication channel 3 **only the intended second device 2 can receive and respond to it.**" (see Hermann, column 11, lines lines 32-35)

In short, Hermann explicitly teaches away from a bidirectional location-limited channel because Hermann **relies** on a unidirectional wireless communication channel. For example, Hermann discloses keeping the unidirectional wireless communication channel activated for a limited time and then immediately disabling it to "prevent accidental information exchange" (see Hermann, column 13, lines 26-39 and lines 33-35). One skilled in the art will recognize that the bidirectional location-limited channel of embodiments of the present invention cannot be disabled in the same manner after the security credential is sent, because, if the bidirectional channel is disabled, embodiments

of the present invention may not receive the provisioning information sent over the location-limited channel. Nothing in Balfanz, Weiner, Hermann, or Lowensohn, either separately or combined, implies or suggests receiving from the provisioning device over the bidirectional location-limited channel provisioning information and/or other information that can be used by the wireless sensor.

In contrast, embodiments of the present invention use a bidirectional location limited channel. For example, embodiments of the present invention can **exchange** public keys over the bidirectional location-limited channel (see instant application, par. [0056]). In some embodiments of the present invention, any device can become a credential issuing device, because devices can both send and receive credentials and other information over the bidirectional location-limited channel (see instant application, par. [0050]). Nothing in Balfanz, Weiner, Hermann, or Lowensohn, either separately or combined, implies or suggests receiving from the provisioning device over the bidirectional location-limited channel provisioning information and/or other information that can be used by the wireless sensor.

Accordingly, Applicant has amended independent claims 1, 7, and 13 to clarify that embodiments of the present invention receive from the provisioning device over the bidirectional location-limited channel provisioning information and/or other information. These amendments find support in pars. [0044]-[0050], [0056] of the instant application. Applicant has also amended claims 20-25 to match claim language to language in the amended claims. No new matter was added.

Hence, Applicant respectfully submits that the independent claims as presently amended are in condition for allowance. In addition, Applicant respectfully submits that dependent claims that depend upon these independent claims are for the same reasons in condition for allowance and for reasons of the unique combinations recited in these claims.

CONCLUSION

It is submitted that the application is presently in form for allowance.
Such action is respectfully requested.

Respectfully submitted,

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Date: 18 December 2008

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